We Claim:

     1. A method of communicating between a host optical system controller and an optical subcontroller, the method comprising:

     - sending an initial command message from said host to said subcontroller, said command message including a first command identifier indicating a command from said host to said subcontroller;

     - receiving said first command message at said subcontroller;

     - consulting a command database at said subcontroller to interpret said first command message, said database containing mulitple possible valid command identifiers, each command identifier having a corresponding interpretation and action in said database based on a specific type of optical device connected to said subcontroller;

     - at said subcontroller, implementing an action corresponding to said first command message based on said corresponding interpretation of said command identifier and formulating a proper response to said command identifier based on a result of said corresponding action; and

     - sending a response message from said subcontroller to said host, said response message indicating a success or failure of said corresponding action,
wherein said subcontroller ignores subsequent command messages received prior to sending a response message responsive to the first command message.

2. A method as in claim 1 wherein each response message includes at least one optical parameter to be set by said optical subcontroller.

3. A method as in claim 1 wherein said first command message includes at least one optical parameter to be set by said optical subcontroller.

4. A method as in claim 3 wherein said first command message further includes at least one magnitude to which said at least one optical parameter is to be set.

5. A method as in claim 1 wherein said first command message further includes addressing data indicating a portion of an optical subsystem controlled by said optical subcontroller to which the command is to be applied.

6. A database for use in communications between a host optical system controller and an optical subcontroller, said database containing multiple possible valid command identifiers which may be sent from the host to the subcontroller, each valid command identifier causing said subcontroller to perform an action once received by said subcontroller.

7. A database as in claim 6 wherein entries in said database are used by said subcontroller to interpret said command identifier received from said host.

8.   A database as in claim 6 wherein said
database further contains multiple valid responses to be
sent from said subcontroller to said host in response to
said command identifiers.

9.   A database as in claim 6 wherein each
command identifier defines a format of data following
said identifier in a message or response sent between
said host and said subcontroller.

10.   A command message sent from a host
optical system controller to an optical subcontroller,
said command message including a command identifier
which defines a format of data included in said message.

11.   A command message as in claim 10 wherein
said command identifier is referenced in a database
located at said optical subcontroller, said database
including multiple possible valid command identifiers,
an interpretation of said command identifier being
dependent on said command identifier's entry in said
database.

12.   A response message sent from an optical
subcontroller to a host optical system controller in
response to a command message from said host, said
response message including a command identifier
identical to a command identifier contained in said
command message, said command identifier defining a
format of data included in said response message.

13.   A response message as in claim 12 wherein
said command identifier is referenced in a database

located at said optical subcontroller, said database including all possible valid command identifiers.

14.   A method of controlling an optical subsystem, the method comprising:
a) sending a command message from a host controller to a subcontroller;
b) receiving said command message at said subcontroller;
c) decoding said command message at said subcontroller; and
d) interpreting contents of said command message based on what type of optical device is addressed by said command message.

15.   A method as in claim 14 wherein step c) is accomplished by extracting a command identifier and addressing data from said command message.

16.   A method as in claim 15 wherein step d) is accomplished by retrieving a database entry corresponding to said command identifier and based on said addressing data.

17.   A set of command identifiers for use with a control system for reconfigurable optical devices, each commands identifier in the set being sent from a host controller to a subcontroller controlling at least one reconfigurable optical device, each command identifier being processed by the subcontroller when received and causing the subcontroller to perform an action affecting the at least one reconfigurable optical device.

18.   A set of commands identifiers as in claim
17 wherein at least one command identifier ins aid set
sets at least one operating parameter fro said at least
one reconfigurable optical device.

19.   A set of command identifiers as in claim
17 wherein at least one command identifier in said set
sets an alarm thershold for said at least one
reconfigurable optical device, said alarm threshold
determining when said at least one reconfigurable
optical device exceeds acceptable operating limits.

20.   A set of command identifiers as in claim
17 wherein at least one command identifier in said set
retrieves operating data from said at least one
reconfigurable optical device.

21.   A set of command identifiers as in claim
17 wherein at least one command identifier in said set
retrieves an operating status of said at least on
reconfigurable optical device.